

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN W. PUTNAM, LAURENCE E. BERNAT,
JOHN P. WESSON and JOHN H. VONTELL



Appeal No. 2005-2083
Application 10/082,956

ON BRIEF

Before WALTZ, KRATZ, and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal, under 35 U.S.C. § 134, from the examiner's final rejection of claims 1 and 4-7. A copy of each of these claims is set forth below:

1. A polyurethane compound comprising a first component and a second component, said first component consisting of a blend of different polyether based MDI prepolymers, each of said polyether prepolymers having a different diphenylmethane diisocyanate content and said second component comprising an amine curing agent consisting of a blend of diamines.

4. The polyurethane compound according to claim 1, wherein each of said first and second components when

in an uncured state is liquid at room temperature.

5. The polyurethane compound according to claim 1, wherein said first component has a NCO content in the range of from 11.5% to 14.5%.

6. The polyurethane compound according to claim 5, wherein said NCO content is in the range from 12% to 14%.

7. The polyurethane compound according to claim 5, wherein said NCO content is about 13%.

The examiner relies on the following references as evidence of unpatentability:

| | | |
|----------------------|-----------|---------------|
| Gillis et al. | 4,910,279 | Mar. 20, 1990 |
| Gajewski | 5,223,599 | Jun. 29, 1993 |
| Pocius | 5,718,977 | Feb. 17, 1998 |
| Slagel | 6,127,505 | Oct. 03, 2000 |
| Brown et al. (Brown) | 6,509,434 | Jan. 21, 2003 |

(filed Mar. 20, 2000)

Ulrich, Chemistry and Technology of Isocyanates, 1996, page 368.

On page 5 of the brief, appellants state that the claims do not stand or fall together, and that each claim is believed to be independently patentable. Our consideration of a particular claim in this appeal is indicated in each respective heading, infra.¹

¹ To the extent that any one claim has been separately argued, we consider such claim in this appeal. See former regulation 37 CFR § 1.192(c)(7)(2004) and compare current regulation 37 CFR § 41.37(c)(1)(vii)(September 13, 2004). Also see Ex parte Schier, 21 USPQ2d 1016, 1018 (Bd. Pat. App. & Int. 1991).

Claims 1 and 4 stand rejected under 35 U.S.C. § 103 as being unpatentable over Gajewski in view of Ulrich.

Claims 1 and 4-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gillis.

We have carefully reviewed the evidence of record, appellants' appeal brief and reply brief, and the examiner's answer. This review has led us to the following determinations.

OPINION

I. The 35 U.S.C. § 103 rejection of claims 1 and 4 as being obvious over Gajewski in view of Ulrich

We consider claims 1 and 4 in this rejection.

The examiner's position for this rejection is set forth on page 3 of the answer.

Beginning on page 5 of the brief, appellants state that claim 1 is directed to a polyurethane compound comprising a first component, and a second component. Appellants state that the first component consists of a blend of different polyether based MDI (4,4'-diphenylmethane diisocyanate) prepolymers, each of the prepolymers having a different diphenylmethane diisocyanate content. Appellants also state that the second component comprises an amine curing agent consisting of a blend of

diamines. Appellants argue that Gajewski differs from this subject matter of claim 1 by disclosing diphenylmethane diisocyanate, from among a list of six other preferred diisocyanates, for making prepolymers, and the examples of Gajewski only use TDI (toluene diisocyanate). Brief, page 5. Appellants also argue that Gajewski do not teach or suggest the claimed first component wherein the prepolymers have different diphenylmethane diisocyanate content. Brief, page 5.

We first note that a reference is not limited to its examples, but is available for all that it fairly discloses and suggests. See In re Widmer, 353 F.2d 752, 757, 147 USPQ 518, 523 (CCPA 1965). Hence, appellants' argument that the examples of Gajewski are limited to TDI is not convincing. As recognized by appellants, Gajewski does teach MDI. See column 5, lines 16-23.

With regard to the different diphenylmethane diisocyanate content, as stated by the examiner on page 3 of the answer, the prepolymers of Gajewski would have different NCO content because each is made from polyols having differing molecular weights. See column 4, beginning at line 41 through column 5, line 36. Appellants do not dispute this statement made by the examiner. Gajewski teaches that a mixture of prepolymers is formed by reacting first and second polyethers (each having molecular weights different from each other) with a multi-functional isocyanate. See column 4, lines 41-66.

With regard to Ulrich, on pages 5-6 of the brief, appellants argue that Ulrich is non-enabling regarding the manufacture of polyurethane compounds of the type set forth in appellants' claim 1, and that Ulrich "merely recognizes the existence of certain isocyanates". Appellants argue that Ulrich does not teach one of ordinary skill in the art how to select particular prepolymers to form a polyurethane compound. Appellants argue that Ulrich is silent as to how to form the claimed blend of prepolymers as set

forth in claim 1. We note that the examiner merely relies upon Ulrich for teaching that MDI is less volatile than TDI, and that therefore, there is a trend to replace TDI with MDI. More importantly, however, as discussed above, Gajewski suggests appellants' claimed polyurethane compound, including a blend of different polyether based MDI prepolymers. Gajewski is not limited to the working examples. Id.

With regard to claim 4, on page 6 of the brief, appellants argue that neither Gajewski or Ulrich teaches that each of the first and second components, when in an uncured state, is liquid at room temperature. We refer to the examiner's response to this argument, made on page 4 of the answer. As stated by the examiner, Brown, U.S. Patent No. 6,509,434, on the first page, under "Other Publications", lists a reference that indicates that Ethacure 300 is a liquid. In response to this position of the examiner's, on page 1 of the reply brief, appellants argue that Brown "is not a cited and applied patent". Appellants do not dispute the examiner's interpretation of Brown on this issue. Consequently, we will accept the examiner's factual findings in this regard. In re Fox, 471 F.2d 1405, 1407, 176 USPQ 340, 341 (CCPA 1973); In re Boone, 439 F.2d 724, 727, 169 USPQ 231, 234 (CCPA 1971).

In view of the above, we affirm the 35 U.S.C. § 103 rejection of claims 1 and 4 as being obvious over Gajewski in view of Ulrich.

II. The 35 U.S.C. § 102(b) rejection of claims 1 and 4-7 as
being by Gillis

We consider claims 1, 4, 5, 6, and 7 in this rejection.

The examiner's position for this rejection is set forth at the top of page 4 of the answer. Appellants' position is set forth on pages 6-8 of the brief.

In particular, with regard to claim 1, appellants argue that the claimed phrase "consisting of" in claim 1, as used in connection with the second component, precludes the inclusion of at least one amino functional compound, which is essential to the reaction system of Gillis. Brief, page 7.

Upon review of the claim language in this regard, we observe that the claim reads "said second component **comprising** an amine curing agent consisting of a blend of diamines." [emphasis added] Therefore, claim 1 allows for other components, in addition to the amine curing agent consisting of a blend of diamines, for the second component. Hence, appellants' arguments in this regard are not convincing. That is, appellants are arguing a limitation that is not set forth in claim 1, i.e., claim 1 allows for additional ingredients, in addition to the amine curing agent.

Also, as pointed out by the examiner on page 4 of the answer, example 1 of Gillis indicates that the polyisocyanate composition 1B (PC-1B) was prepared by adding 26.54 parts of Polyether Polyol 1 to 49.94 parts of Polyisocyanate 1. This composition has an NCO content of 13.4%. We agree with the examiner that this NCO content anticipates claims 5, 6, and 7.

With regard to claim 4, appellants argue that Gillis does not teach or suggest that the first component and the claimed second component are both liquid at room temperature when in an uncured state. In response, on page 5 of the answer, the

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examiner refers to Slagel, U.S. Patent 6,127,505, for showing the fact that diethyltoluene diamine, having the same ratio as the one used by Gillis, is liquid. The examiner also refers to Pocius, U.S. Patent No. 5,718,977, for showing that polyoxyalkylene polyamines are liquid. In response, on page 2 of the reply brief, appellants' only response is that the Pocius reference is not a reference which was cited and applied by the examiner. This argument is unconvincing for the same reasons discussed above with regard to the Brown reference.

In view of the above, we therefore affirm the 35 U.S.C. § 102(b) rejection of claims 1 and 4-7 as being anticipated by Gillis.

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III. Conclusion

Each of the rejections is affirmed.

No time period for taking any subsequent action in connection with appeal may be extended under 37 CFR 1.136(a)(iv)(effective Sept. 13, 2003); 69 Fed. Reg. 49960 (Aug. 12, 2004); 1286 Off. Gaz. Pat. Office 21 (Sept. 7, 2004)).

AFFIRMED

THOMAS A. WALTZ
Administrative Patent Judge

Peter F. Kratz
PETER F. KRATZ
Administrative Patent Judge

Beverly A. Pawlikowski)
BEVERLY A. PAWLIKOWSKI)
Administrative Patent Judge)

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